ascendi

Ascendi ESG 2020

Driving the Future

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2020 in figures

Performance Indicators

Manufactured Capital

869 km
in operation

6
Projects awarded

2
Service contracts for traditional toll collection

1
Operation and maintenance service provision

7
Contracts for the provision of electronic toll collection services

Human Capital

732
Employees

34%
Female

10,987
Training hours

11%
Turnover rate

8
Accident frequency index

Social Capital

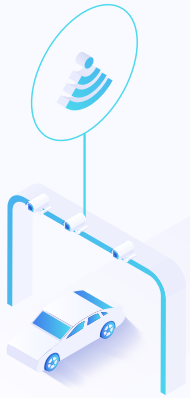
95%
Local purchases

142 k
Customer support calls answered

9.7
Road Accident Rate

€427k
Investment in the Community

34,804
Customers registered on the Ascendi portal



Intellectual Capital

€767k
Investment in R&D

6
Protocols with Universities

1,965h
Support for higher education

Natural Capital

80%
Renewable Energy Consumption

9M kWh
Electricity Consumption

€436k
Investment in eco-efficiency

605,709
$tCO_2$and emissions

73%
Recovered waste

Message from the CEO

In a year particularly marked by COVID-19, Ascendi significantly reinforced its activity as part of social responsibility.

Luís Silva Santos

The year 2020 was definitively marked by the COVID-19 pandemic, which led to a very rapid adaptation of the Organisation in order to guarantee the protection of our employees and, at the same time, fully maintain the performance of our activities, while always safeguarding the level of service provided and the safety of the users of the routes we operate.

We maintained a clear focus on expanding Ascendi's activities in Portugal and abroad, having won a new operation and maintenance contract and another one for toll collection in Portugal. Abroad, we took part in tenders that will enable us, if successful, to operate a free-flow toll collection system similar to the one operated in Portugal. This model is particularly well suited to congestion charges systems, which are undergoing rapid development in different European and American cities, and should represent a new and relevant market for Ascendi.

Internally we have carried out different projects as part of innovation and digital transformation of the company and its operations. Amongst these, we highlight the inclusion of new modules in SustIMS, an infrastructure management software developed by Ascendi, and the internal programme for accelerating digital culture, DX Culture. We have also initiated developments on new fronts, ranging from the creation of an app aimed at infrastructure users to assessing the potential for handling the data processed by our day-to-day activity.

We have once again improved all indices with regard to the safety of our operations, while continuing with distinct initiatives as part of road safety. Amongst these, we highlight the programme to reinforce the safety barriers on all Ascendi concessions, a significant investment started in 2019 and which involves, among other particularities, developing and approving a specific solution for bridges and viaducts that the market does not yet have available.

Despite the pandemic, the significant investments underway to modernise the toll system of the Norte and Grande Lisboa Concessions continued. We also initiated the programme to renew almost all the roadside equipment associated with the MLFF (multi-lane free flow) toll collection system.

In a year particularly marked by COVID-19, Ascendi significantly reinforced its activity as part of social responsibility. In addition to our contribution as an exclusive patron of the Serralves Foundation's 'Treetop Walk' project, it was possible to establish a close relationship with hospitals located in our network's area of influence, helping them throughout the pandemic period with various pieces of equipment that they needed, including a significant investment in ventilators, which unfortunately were very useful in the latest wave of infections that we have just gone through.

The fall in traffic seen as a result of the pandemic significantly affected the transport sector and, due to the specific characteristics of its business and the contracts it operates, the impact on Ascendi's economic performance in 2020 did not have the same magnitude.

We thus enter 2021 determined and better able to follow the path that will inevitably require adapting transport infrastructures to the paradigm of energy transition and connectivity, consolidating a new mobility standard.

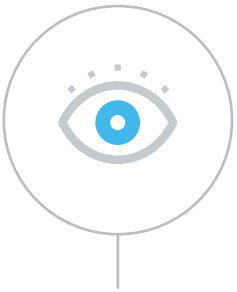
Luís Silva Santos

> We have once again improved all indices with regard to the safety of our operations

Ascendi

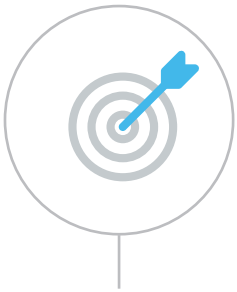
With more than two decades of consolidated experience in asset management, provision of toll collection services, and operation and maintenance of road infrastructures, Ascendi is recognised for its capacity for innovation and operational efficiency[2].

1.1.
Mission, Vision and Values



Vision

To be the benchmark for quality and efficiency in developing and managing road mobility infrastructures.



Mission

To promote efficiency, innovation and sustainability in operating and maintaining road mobility infrastructures, ensuring customer convenience, employee development and the creation of shareholder value.

[2] For more information about Ascendi's history, visit www.ascendi.pt

Values

Team spirit

Encourage cooperation and mutual help in the pursuit of objectives. Lead by example, communicate clearly, spread knowledge and be realistically ambitious in setting objectives.

Safety and well-being

To promote actions and practices that ensure the maximum safety, health and well-being of employees, clients and suppliers.

Customer-oriented

Guide actions towards internal and external customers and maximize the value perceived from the services provided, exceeding expectations.

Creativity and Innovation

To encourage new ways of thinking and acting, creating opportunities to increase efficiency, effectiveness and quality.

Sustainability and Social Responsibility

To make the most of available resources, promoting sustainability and supporting the community culturally, socially and environmentally.

Ethics and Trust

To be a consistently loyal, supportive and non-imposing partner, establishing sustainable relationships of trust with all our stakeholders.

1.2.
Business Areas

Ascendi operates and undertakes its activity in the following business areas:

Asset Management

6 concessions

- Beiras Litoral e Alta (BLA) concession;
- Costa de Prata (CP) concession;
- Grande Lisboa (GL) concession;
- Grande Porto (GP) concession;
- Norte (NT) concession;
- Pinhal Interior (PI) sub-concession.

3,6 billion
Total investment in the six concessions.

Operation and Maintenance

3 Main activities

- Road Operation and Maintenance;
- Intelligent Transport Systems (ITS);
- Maintenance Management.

869 Km
Operated by Ascendi

Toll Collection

Segment leader

Know-how in the following collection systems:

- All-Electronic Toll collection (AET - MLFF System)
- Traditional toll collection (open or closed systems)

137 M
Transactions processed

1.2.1.
Concessions and Service Provision

6
Concessions

627 km
Of Ascendi Concessions

869 km
In operation

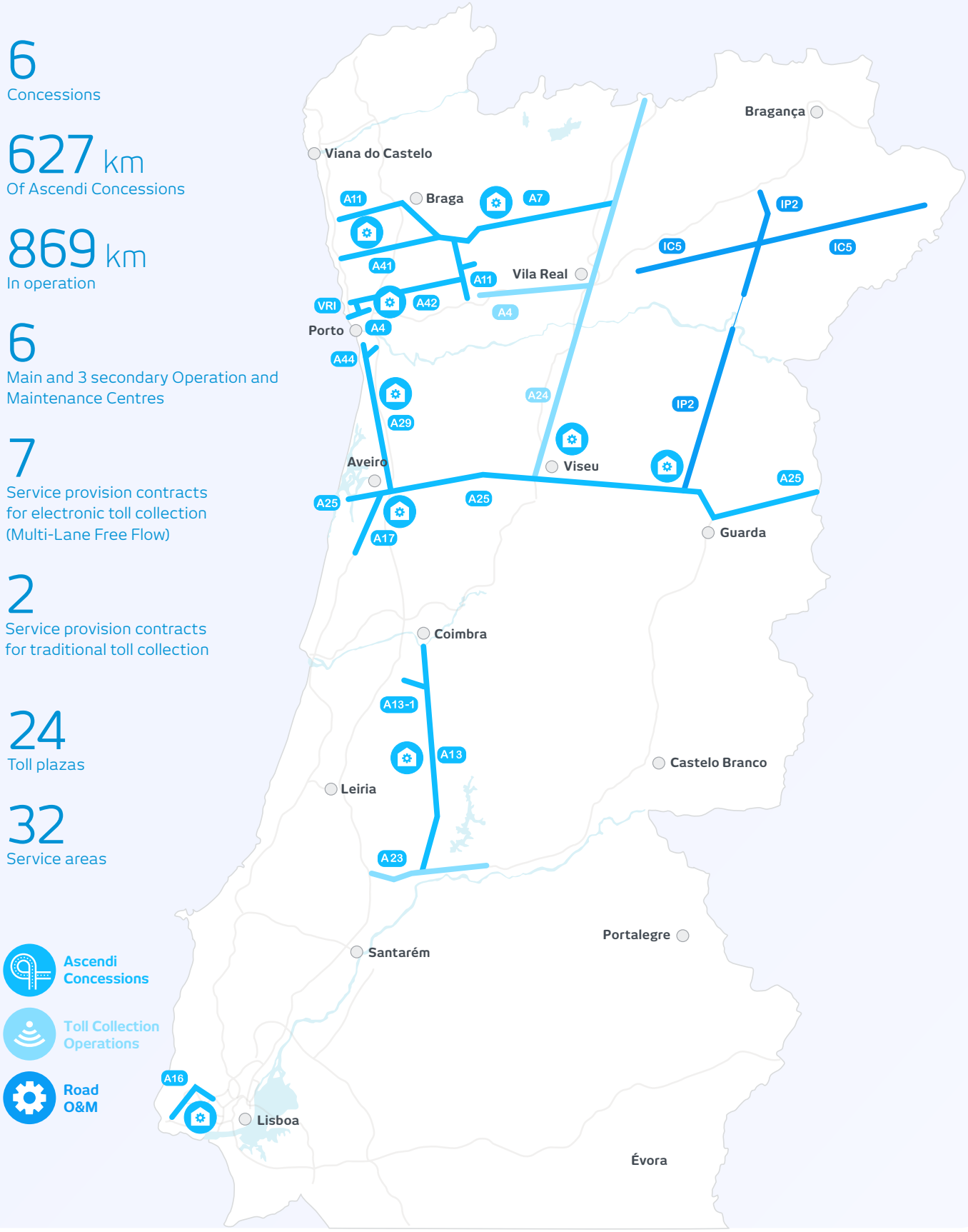
6
Main and 3 secondary Operation and Maintenance Centres

7
Service provision contracts for electronic toll collection (Multi-Lane Free Flow)

2
Service provision contracts for traditional toll collection

24
Toll plazas

32
Service areas



Ascendi Concessions

	Length	Motorways	Collection system	Collection Locations	Structures	Service Areas
Norte Concession	179 km	A7 A11	Traditional Toll	21 toll plazas 94 manual lanes (cabins) 72 electronic lanes 21 toll plaza buildings	331 Structures 56 bridges and viaducts	5 service areas managed by Ascendi
Costa de Prata Concession	105 km	A44 A29 A25 A17	Electronic Toll Collection	20	184 Structures 14 bridges and viaducts	5 service areas, of which 4 are managed by Ascendi
Beiras Litoral e Alta Concession	172 km	A25	Electronic Toll Collection	26	267 Structures 68 bridges and viaducts	5 service areas, of which 2 are managed by Ascendi
Grande Porto Concession	55 km	A41 A42 A4 VRI	Electronic Toll Collection	24	148 Structures 12 viaducts	2 service areas managed by Ascendi
Grande Lisboa Concession	23 km	A16	Traditional Toll	3 toll plazas 26 manual lanes 16 free flow one-way	57 Structures 4 viaducts	2 service areas managed by Ascendi
Pinhal Interior Sub-concession	93 km	A13 | A13-1	Electronic Toll Collection	32	141 Structures 24 viaducts	2 service areas managed by Ascendi

Provision of Services beyond Ascendi Concessions

	Length	Road/ Motorway	Collection Locations	Structures
Operation and Maintenance Service Provision				
Douro Interior Subconsession	242km	IP2 | IC5	-	249 structures 44 bridges and viaducts
Provision of Toll Collection Services Multi-Lane Free Flow				
Interior Norte	157km	A24	26 electronic collection points	-
IP Concession | Marão Tunnel	25km	A4	2 electronic collection points	-
IP Concession | Torres Novas (A1) / Abrantes	37km	A23	6 electronic collection points	-

2.1.
Sustainable Development Goals (SDGs)

Aware of the impacts of its activity and of its responsibility to promote sustainable development, Ascendi seeks to align its activities with the **United Nations' Agenda 2030**, with direct contributions to:

Ascendi focuses its actions on the objectives it outlines as priorities, considering the impacts of its activities. Identifying priority SDGs is aligned with the perspective of its stakeholders, who considered SDG 8, SDG 9, SDG 11 and SDG 13 as priorities.

Activity	Outputs	Consequence	Impacts	Priority SDGs and targets
Toll collection service	Increased tax/public revenue from road mobility	Information and revenues from toll collection	User experience	Target 11.2
	Access to a network of safe and quality motorways	Better traffic quality and road safety prevention	Reducing the risk of road accidents and improving user experience	Target 3.6
		Maintenance of motorways and existing safety operations		
		Labour force needs for operating and maintaining motorways	Exposure of employees and subcontractors to safety risks	Target 8.8
Operation and maintenance of road infrastructures	Connectivity of populations and environment	Noise and GHG emissions from road vehicles	Generation of noise pollution and consequences for neighbouring communities	
			Increase in GHG emissions	Targets 13.1 e 13.2
		Animals killed on the road due to traffic	Loss of biodiversity	Target 15.5
		Greater territorial connectivity	Economic growth and social development of the surrounding areas	Target 9.1
		Efficiently improving infrastructure resources	Making infrastructure more sustainable with adoption of clean and sustainable technology	Target 9.4

Activity	Outputs	Consequence	Impacts	Priority SDGs and targets
Ethics Channel	Code of Ethics Training Publication of conflict of interest policy	Increased knowledge of the organisation for anti-corruption policies.	Substantial reduction of corruption and bribery of all forms	Target 16.5
Human Resources	Inclusion of the recruitment of people with disabilities in the human resources policy	More comprehensive recruitment	Greater employee inclusion and diversity	Target 10.2
	Inclusion of the principle of equality in the hiring of management bodies in the human resources policy	Greater presence of women in management	Ensuring gender equality and equal opportunities.	Target 5.5

SDG	Target	Ascendi's Contribution
	Target 8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.	• Health and safety initiatives, including training, audits, monitoring and reporting; • Certification: ISO 45001 - Management System for Occupational Health and Safety; • Inclusion of OHS criteria in contracts with suppliers; • Training for subcontractors. For more information about Ascendi's contribution to SDG 8, see the chapter Human Capital.
	Target 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.	• Integrated Management System (through ISO 9001, 14001 and 45001 certifications) relevant to the provision of access to quality infrastructure for local communities. For more information about Ascendi's contribution to SDG 9, see the chapter Social Capital.

Target 3.6 Halving the overall number of road traffic accident deaths and injuries by 2020.

- Promoting customer safety on the road;
- Monitoring road safety data;
- Awareness-raising initiatives, periodic inspections and safety exercises.

For more information about Ascendi's contribution to SDG 3, see the chapter Social Capital.

Target 11.2 By 2030, providing access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with particular attention to the needs of those in vulnerable situations, women, children, the disabled and elderly.

- Promoting customer safety on the road;
- Monitoring road safety data;
- Awareness-raising initiatives, periodic inspections and safety exercises.

For more information about Ascendi's contribution to SDG 11, see the chapter Social Capital.

Target 13.2 Integrating climate change measures into national policies, strategies and planning.

- Generating renewable energy;
- Transitioning to sustainable mobility, through the acquisition of electric vehicles;
- Raising employees' awareness to climate change and energy consumption.

For more information about Ascendi's contribution to SDG 13, see the chapter Natural Capital.

Target 15.5 Taking urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

- ISO 14001 - Environmental Management System Certification;
- Partnerships and measures to limit biodiversity risks.

For more information about Ascendi's contribution to SDG 15, see the chapter Natural Capital.

Target 5.5 Ensuring women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

- Inclusion of gender equality criteria for management bodies in human resources policy.

For more information about Ascendi's contribution to SDG 5, see the chapter Human Capital.

Target 10.2 By 2030, empowering and promoting the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

- Inclusion of equal opportunity criteria for people with disabilities in the human resources policy.

For more information about Ascendi's contribution to SDG 10, see the chapter Human Capital.

Target 16.5 Substantially reducing corruption and bribery in all their forms.

- Training and dissemination of the code of ethics;
- Publication of conflict-of-interest policy.

For more information about Ascendi's contribution to SDG 16, see the chapter Ethics.

Target 13.1 Strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

- Investment in eco-efficiency;
- Environmental and waste management.

For more information about Ascendi's contribution to SDG 13, see the chapter Natural Capital.

Target 9.4 By 2030, upgrading infrastructure and retrofitting industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

- Integrated Management System (through ISO 9001, 14001 and 45001 certifications) relevant to the provision of access to quality infrastructure for local communities.

For more information about Ascendi's contribution to SDG 9, see the chapter Social Capital.

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2.2.
Value Creation

Manufactured Capital

Inputs

869km	24	136	32	8
in operation	toll plazas	collection points	service areas	electric vehicle charging stations

Human Capital

Inputs

732	34%	10,987h	€156K
employees	female	training	investment in training

Intellectual Capital

Inputs

€767K	6 protocols
investment in R&D	with universities

Social Capital

Inputs

€2,794	95%	€427K	58
campaign investment	local purchases	investment in the community	Customer support staff

Natural Capital

Inputs

€436K	65,347GJ	80%	935t
investment in eco-efficiency	energy consumption	electricity from renewable sources	waste generated

Outputs

11,282 vehicles per day

2.58x10⁹ traffic volume

99.7% road availability

€232M toll collections

87% use of automatic payment methods

Outputs

4% absenteeism rate

11% turnover rate

96% employees with assessed performance

72% employee satisfaction index

Outputs

1,965h higher education study programmes - supported volume

Projects:
CBO v2, SustIMS, Virtual Gantry, GoDigital, DX Culture, PASMO, C-Roads

Outputs

€663M economic value distributed

142K customer support calls answered

89% service charge

9,7 road accident rate

251 casualty accidents

6 community projects

Outputs

605,709 tCO_2 emitted

96,659kWh renewable energy produced

73% waste recovered

103km acoustic barriers

3.1.
Human Capital

Ascendi Human Capital Management

Human Capital is one of Ascendi's most important assets. As such, attracting and retaining talent; promoting the development and training of employees; and managing their careers are obvious investments.

732
Employees

42
Years of age on average

11
Years of seniority on average

66%
Men

34%
Women

Recruitment and Selection

100%
of management staff are hired locally*

*Hired locally: from Portugal

Evaluation and performance management model

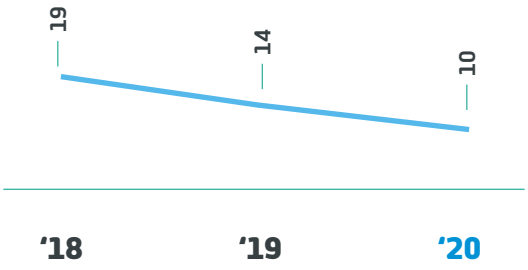
96,5%
of employees received performance evaluation

Training and Development

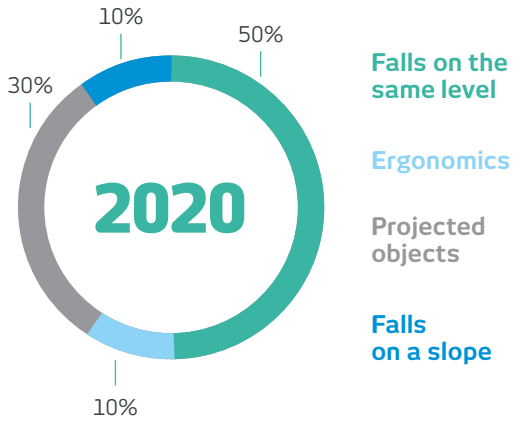
10,987h
of training hours

Occupational Health and Safety

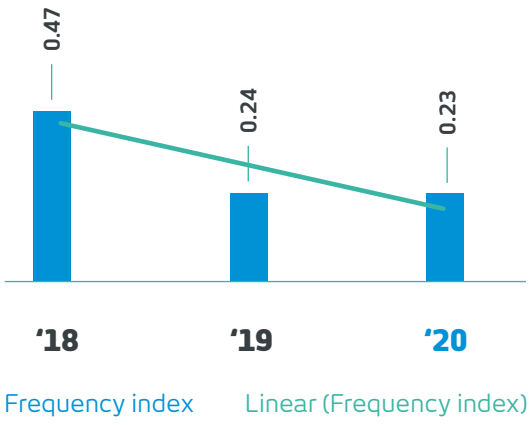
Change in the no. of work-related injuries



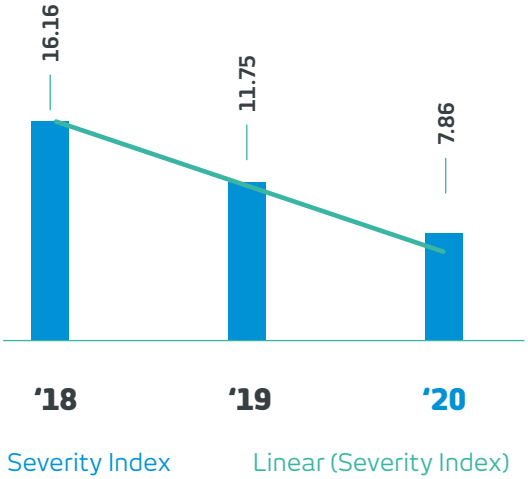
Injury types



Severity Index



Frequency index



3.2.
Social Capital

Development and Support for Local Communities

Inputs

- **€2,794** campaign investment
- **€427K** investment in the community
- **32** partnerships with entities and sector associations

Customer Satisfaction and Service Quality

Inputs

- **58** traffic control centre and customer service centre employees

Customer Safety

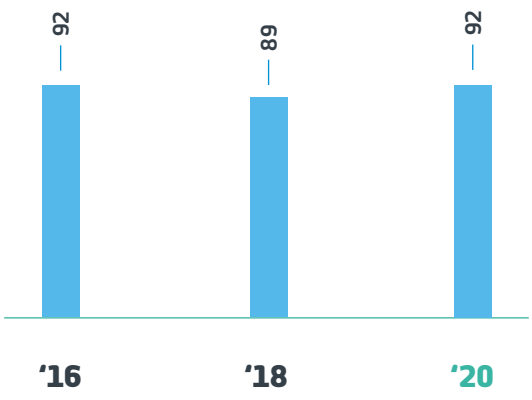
Inputs

- **€1,5M** investment in vertical signage
- **€424K** investment in horizontal road markings
- **€2M** investment in road surface preservation
- **€3,2M** investment in safety barriers

96%

Level of satisfaction with the quality of the service provided to its customers.

Mystery customer (%)



Outputs

€663M
economic value distributed[16]

6
community projects

Outputs

133,406
calls answered (COM) – traffic control and managementrate

676
calls answered (COM) – SOS

142,386
calls answered – customer support

89%
call centre assistance index

Outputs

9.7%
accident

32.5%
accident rate

251
casualty accidents

[16] Distributed economic value = Operating costs + Employee salary benefits + Payment to capital providers/government + Community investment

Ascendi Portal

34,804 ↑
Registered customers in total

58,000 ↑
No. of payments made through the portal

29,600 ↑
Registered customers in 2020

€ 1,482,000 ↑
Amount collected by the portal in 2020

3.3.
Intellectual capital

Research and Development

Inputs

€767,597
investment in R&D projects[3]

Outputs

€173,811M
Sales and services rendered

Support for Academic and Research Institutions

Inputs

6
protocols with universities and higher education institutions

Outputs

1,965
higher education courses supported

3.3.1.
R&D – Research and Development

Investment in the research and development of new solutions and projects is a priority at Ascendi. It is considered essential for providing good customer service, along with global digitalisation. This investment in R&D contributes not only to improvements in customer relations, but also to the efficiency of Ascendi's activity.

3.3.2.
Support to Academic and Research Institutions

Ascendi believes that successful research and development depends on educating future generations. They will be better prepared to keep up with rapid global developments, particularly at the technological level. In 2020, the protocol strategy with higher education institutions was maintained, and a new protocol was established with the Instituto Superior de Engenharia do Porto (Porto College of Engineering). As a result of these protocols, Ascendi supported 1,965 hours in higher education study programmes in 2020.

The main protocols established between Ascendi and higher education institutions include the following:

- Universidade Católica Portuguesa (Portuguese Catholic University)
- University of Minho;
- University of Coimbra;
- University of Porto Faculty of Economics;
- University of Porto Faculty of Engineering;
- Instituto Superior de Engenharia do Porto (Porto College of Engineering);
- Instituto Superior Técnico – University of Lisbon;
- Faculty of Human Motricity;

[3] SustIMS, CBO v2, DRIVE, Virtual Gantry, Godigital, Digital Transformation, PASMO, C-Roads, ITSM.

• University of Aveiro.

3.4.
Natural Capital

Environmental Management

Inputs

€435,5K
investment in eco-efficiency

Energy Consumption and Emissions Management

Inputs

65,347GJ
energy consumption (fuel and electricity)

899.514l
fuel

9,136,244kWh
electricity

1,793,160kWh
non-renewable electricity consumption

90.159kWh
renewable production (consumed)

7,343,084kWh
renewable electricity consumption

75.4kWp
installed self-production capacity

Resource Consumption and Waste Management

Inputs

935t
waste produced

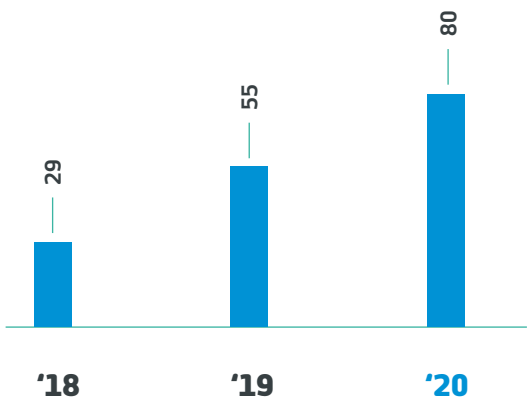
7t
hazardous waste

928t
non-hazardous waste

3.4.1
Energy consumption and emission management

Ascendi's energy consumption in 2020 was 65,347 GJ (7% less than the previous year), 80% of which was renewable energy. This is an increase of 25 percentage points compared to 2019.

Percentage of electricity from renewable sources



[25] Includes emissions avoided through self-production and the purchase of green energy (from H2).

Outputs

104GJ/km
Energy intensity (grid dimensions)

Outputs

605,709tCO_2e
CO_2 emissions

902[25]tCO_2e
CO_2 emissions avoided

96,659kWh
renewable energy produced

Outputs

679t
recovered waste

The eco-efficiency measures implemented in 2020 represented an investment of **€435,515**, in measures such as:

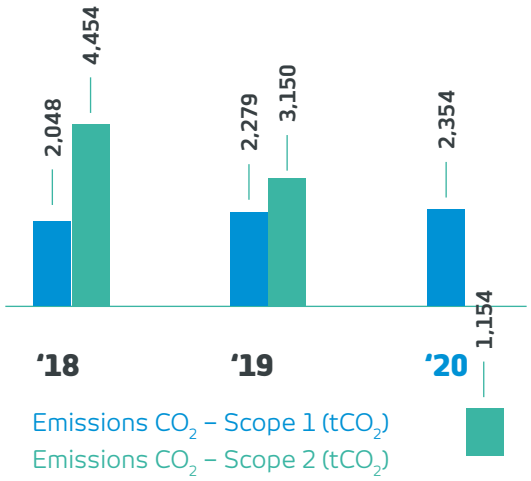
- Contracting the supply of 100% renewable energy, improving the efficiency of the Multi-Lane Free Flow data centre, and replacing lighting fixtures on motorways.

In 2020, the Ascendi data centre in Maia began operations. This new equipment has made it possible to reduce energy consumption by around half in comparison with the previous equipment.

For 2021, we anticipate the conclusion of the **Strategic Energy Manual**; the **installation of 8 photovoltaic SCPUs**, with total power of 250 KWp and an annual production of 360 MWh; the **construction of a carport cover using photovoltaic panels; a study on the existing solar potential along the roads; replacement of motorway lighting fixtures; and improving the efficiency of the Multi-Lane Free Flow data centre** in the Aveiro OMC.

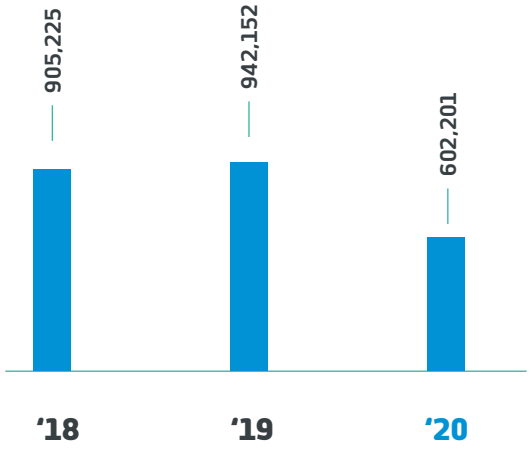
CO_2 emissions in 2020 were 605,709 tCO_2 which represents a decrease of 36% compared to 2019 (942,152 tCO_2).
Of the total emissions of vehicles circulating on Ascendi's roads, 0.4% were scope 1 (2,354 tCO_2), 0.2% were scope 2 (1,154 tCO_2) and 99.4% were scope 3 (602,201 tCO_2).

Total emissions Scope 1 and 2



Emissions CO_2 – Scope 1 (tCO_2)
Emissions CO_2 – Scope 2 (tCO_2)

Total emissions Scope 3

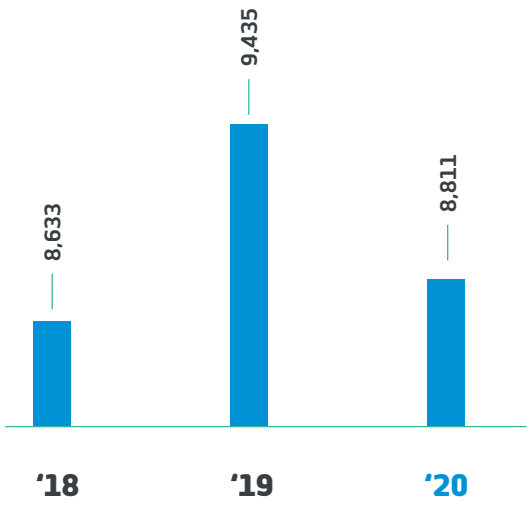


Emissions CO_2 – Scope 3 (tCO_2)

Water

Considering the importance of reducing water consumption as an effective way of managing resource consumption, Ascendi ensures compliance with the legislation in force in all its operations and promotes various initiatives.

Water consumption (m^3)



Noise

Noise Management

Inputs

103km acoustic barriers

Outputs

22 noise complaints

Sustainable Mobility at Ascendi

Ascendi's vehicle fleet was made up of 197 vehicles powered exclusively by thermal engines, 8 plug-in hybrid vehicles and 4 electric vehicles in 2020. These figures represent an increase of 200% in total PHEV and EV vehicles compared to 2019. In line with sustainability objectives, 3 more electric vehicle charging posts were installed at the Norte concession toll gates.

The fleet projection for 2021 estimates 13 fewer vehicles powered exclusively by thermal engines. These are anticipated to be replaced with 10 more PHEV vehicles and 4 more EV vehicles. It is also planned to install 6 electric vehicle charging posts at the new Boavista headquarters and 7 at the Operation and Maintenance Centres.

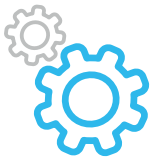
4.1.
Response to the COVID-19 Pandemic

Since the beginning of the COVID-19 pandemic, Ascendi as been focused on ensuring the continuity of its activity, maintaining:

€233,000
Investment in equipment and systems for remote working

Health and safety of employees: through provision of personal protection equipment and consumables (alcohol gel, masks and gloves), and the necessary computer equipment to enable remote work to be carried out in the best conditions of safety and comfort.

Community Support: through donation of consumables and dozens of items of equipment to four National Health System hospital centres, such as ventilators and oximeters, essential tools in the fight against the pandemic by these institutions, donations in kind to the Banco Alimentar Contra a Fome [Food Bank Against Hunger] in Porto and Lisbon, and other initiatives as described in the chapter Social Capital.



Providing all minimum services and ensuring, **in all aspects, the operation** of the infrastructure and safety in customer service.

Crisis Office | Covid-19

In order to respond to the impacts of the pandemic, the COVID-19 Crisis Office was created with the following mission:

Centralise the monitoring and management of the impact of the COVID-19 pandemic at Ascendi;
Outline, propose and implement approaches in the field of prevention, awareness-raising and guidance for employees;
Promote the creation, implementation monitoring and updating of the prevention and contingency plan.

The Office comprises:

Head of Quality Service, Environment and Safety

3 Occupational Medicine Doctors

Manager of Human Resources

Other parties, depending on the initiatives

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